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## EUROPEAN PATENT APPLICATION

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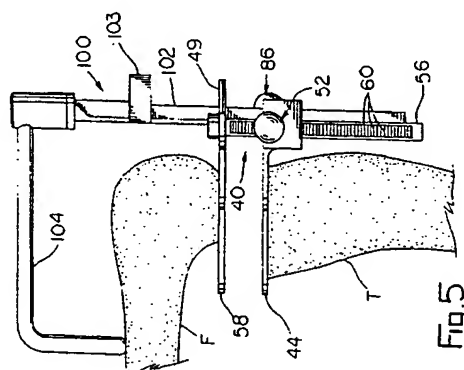
### (54) Instrumentation for use in orthopaedic surgery

(57) The instrumentation set of this invention assists the surgeon in selecting the proper implant components, in determining the amount of distal bone to resect, and in aligning instrumentation designed to resect the bone. The instrumentation set provides numerous systems for verifying to the surgeon that he has correctly aligned the instruments prior to removing any bone.

The set includes a rotational alignment guide, which aids the surgeon in establishing the appropriate rotational alignment for the knee as determined by reference to standard femoral landmarks such as the posterior condyles and epicondyles. The rotational alignment guide includes a slot for guiding a saw blade for removal of the posterior condyles of the femur.

The set further includes a tensor designed to tense the knee joint in flexion and extension. The tensor is activated by a torque wrench so that a measured amount of tension force can be applied to the joint. The tensor is configured to slidably carry sizing rods, which contact the femur and include a plurality of markings, which relate to the size of the femur as well as the spacing between the femur and tibia. This information is used by the surgeon to select the proper size of femoral and tibial articulate surface components. The sizing rods are connected to the tensor when the tibial is in flexion and in extension, which will indicate to the surgeon any varia-

tion required in the amount of bone to be resected.



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# PARTIAL EUROPEAN SEARCH REPORT

Application Number

which under Rule 45 of the European Patent Convention EP 96 20 0031 shall be considered, for the purposes of subsequent proceedings, as the European search report

| DOCUMENTS CONSIDERED TO BE RELEVANT  |  |   |  |
|--|--|---|--|
| Category   | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim   | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| Y  | GB-A-2 261 604 (ATTFIELD)<br>* page 5, line 7 - page 7, paragraph 4;<br>figures 1,2 *  | 1-3,9-11  | A61B17/02<br>A61B17/15                       |
| Y  | FR-A-2 648 699 (MATCO)<br>* page 3, line 19 - page 5, line 20;<br>figures 1,3 *  | 1,9<br>10   |  |
| Y  | US-A-5 059 194 (MICHELSON)<br>* column 3, line 14 - line 44; figures 1,9 *   | 2,3   |  |
| Y  | US-A-4 487 203 (ANDROPHY)<br>* column 4, line 13 - line 21; figure 1A *<br>* column 7, line 46 - column 8, line 2;<br>figure 7 * | 9-11  |  |
| A  | EP-A-0 322 363 (PROTEK)<br>* column 6, line 15 - line 28 *<br>* column 7, line 62 - column 9, line 23;<br>figures 1,7,8 *        | 1,4,9,12  |  |
|  |  |   | TECHNICAL FIELDS SEARCHED (Int.Cl.6)         |
|  |  |   | A61B<br>A61F                                 |
| INCOMPLETE SEARCH  |  |   |  |
| <p>The Search Division considers that the present European patent application does not comply with the provisions of the European Patent Convention to such an extent that it is not possible to carry out a meaningful search into the state of the art on the basis of some of the claims</p> <p>Claims searched completely:</p> <p>Claims searched incompletely:</p> <p>Claims not searched:</p> <p>Reason for the limitation of the search:</p> <p>see sheet C</p> |  |   |  |
| Place of search  |  | Date of completion of the search  | Examiner                                     |
| THE HAGUE  |  | 12 April 1996   | Moers, R                                     |
| CATEGORY OF CITED DOCUMENTS  |  |   |  |
| <p>X : particularly relevant if taken alone</p> <p>Y : particularly relevant if combined with another document of the same category</p> <p>A : technological background</p> <p>O : non-written disclosure</p> <p>P : intermediate document</p>   |  | <p>T : theory or principle underlying the invention</p> <p>E : earlier patent document, but published on, or after the filing date</p> <p>D : document cited in the application</p> <p>L : document cited for other reasons</p> <p>&amp; : member of the same patent family, corresponding document</p> |  |

EPF FORM 1501 (01/92) (PACD)



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# PARTIAL EUROPEAN SEARCH REPORT

Application Number

EP 96 20 0031

| DOCUMENTS CONSIDERED TO BE RELEVANT |  |                   | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
|-------------------------------------|--|-------------------|--|
| Category                            | Citation of document with indication, where appropriate, of relevant passages  | Relevant to claim |  |
| A                                   | W0-A-94 05212 (DEPUY)<br>* page 23, line 28 - page 24, line 26;<br>figure 10 * | 4,12              |  |
| A                                   | W0-A-94 00056 (3M)<br>* page 10, line 22 - page 11, line 26;<br>figures 5,6 *  | 4,12              |  |
|                                     |  |                   | TECHNICAL FIELDS SEARCHED (Int.Cl.6)         |
|                                     |  |                   |  |
|                                     |  |                   |  |

EPO FORM 1503 03/92 (P/C/L)



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INCOMPLETE SEARCH

Claims searched completely: 1-7,9-13

Claims not searched: 14-18

Method for treatment of the human or  
animal body by surgery or therapy  
(see article 52(4) of the European  
Patent Convention)

Claim not searched: 8

Scheme, rules and method for performing mental acts  
Art 52(2)(c)